



**DATE:** October 1, 2021  
**INTERPRETATION NO.:** CI2021-0009  
**TITLE:** Trenching, Excavation, Bedding, and Backfilling of Piping  
**RELATED DEPT. & DIVISION:** Development Services Department  
**TOPIC:** Pipe Installation  
**DECISION MAKER:** Beth M. Culver, AIA, CBO, Building Official

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**SUMMARY:** IPC Section 306 shall be the defining method for trenching, excavation, bedding, and backfilling

**CODE SECTIONS:** 2015 Uniform Plumbing Code (UPC)

- [§314.4](#)

2000/2003 Uniform Plumbing Code Answers and Analysis Manual

2015 International Plumbing Code (IPC)

- [§306](#)

**CODE INTERPRETATION:**

**Question:** What is the definition of backfilling material?

**Answer:** The material used to fill the void around the pipe and fittings and the remainder of the excavation or trench from the bottom of the pipe to the top of the excavation or trench.

**Question:** What is the definition of bedding material?

**Answer:** The material used to support the pipe and fitting from the bottom of the excavation or trench to the bottom of the pipe and fittings.

**Question:** What is the correct method and material to be utilized concerning excavation, trenching, bedding, and backfilling?

**Answer:** Section 306 of the 2015 IPC clearly explains in detail the correct materials and procedures concerning all situations where excavation, trenching,

bedding, and backfilling are required. The 2015 UPC has similar verbiage but does not go into the detail the IPC offers.

There is a COA memo dated 12/28/2006 that partially addresses bedding and backfill. It states the use of gravel no larger than ½" is acceptable for bedding.

However, this speaks to bedding alone and does not address backfill. To further confuse the issue, the referenced code Section 315.4 of the 2003 UPC clearly address backfilling while the memo itself deals with bedding. The memo does reference backfilling as to being present on site at the time of inspection but does not identify what that material is.

There is a code interpretation in the 2000/2003 UPC Answers and Analysis Manual also referencing Section 315.4 that gives us an answer for backfill material which shall be no larger than 3/16". So, from these two documents, we are to infer the bedding material shall be no larger than ½" while the backfill material shall be no larger than 3/16". However, neither document, nor the UPC itself, address the installation of these materials as clear as the IPC.

Since Section 306 of the IPC is more prescriptive than the UPC and there are no conflicts between the two, the IPC Section 306 shall be the defining method for trenching, excavation, bedding, and backfilling.



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Beth M. Culver, AIA, CBO, Building Official

*This interpretation was previously approved as CI2015-0003 by Jose Roig, Deputy Building Official.*